

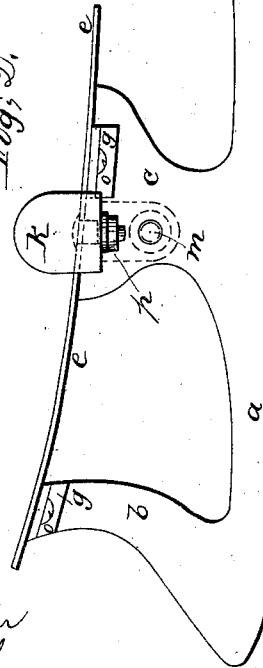
*A. F. Migeon,*

*Skate.*

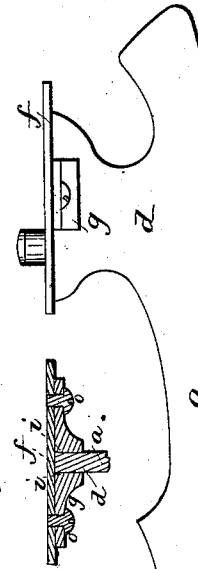
*N<sup>o</sup> 77,901.*

*Patented May 12, 1868.*

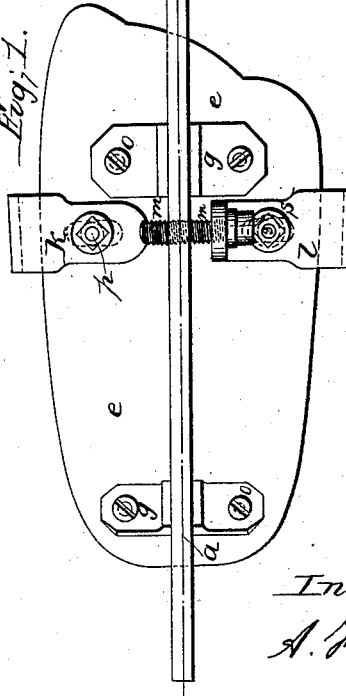
*Fig. 2.*



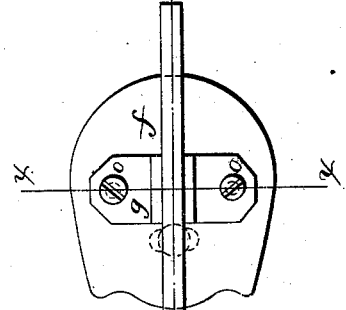
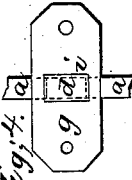
*Fig. 3.*



*Fig. 1.*



*Fig. 4.*



*Witnesses;  
Geo. Orrant  
Chas. Smith*

*Inventor,  
A. F. Migeon*

# United States Patent Office.

ACHILLE F. MIGEON, OF WOLCOTTVILLE, ASSIGNOR TO UNION HARDWARE COMPANY, OF TORRINGTON, CONNECTICUT.

*Letters Patent No. 77,901, dated May 12, 1868.*

## IMPROVEMENT IN SKATES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ACHILLE F. MIGEON, of Wolcottville, in the county of Litchfield, and State of Connecticut, have invented, made, and applied to use, a certain new and useful Improvement in Skates; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is an inverted plan of said skate.

Figure 2 is a side view of the same.

Figure 3 is a cross-section at the line *xx*; and

Figure 4 is a separate view of the double bracket that unites the runner to the plate.

Similar parts are referred to by like letters.

Skates have heretofore been made with the sole and heel-plates united directly to the upper ends of arms formed on the runners, but it is found in use that the leverage and strain cause the parts to work loose and give out when thus riveted together. To obviate this difficulty, the arms of the runner have been united to the sole and heel-plates by pairs of angle-irons, riveted to the respective parts. These, however, are unsightly, and do not allow of the plates being removed from the runner to facilitate the grinding and polishing of the latter.

Skates have also been made with clamps for the sides of the sole of the boot, said clamps, in some instances, being made separate, and adjusted by screw-bolts in slots in the sole-plate. In other instances the clamps have been drawn together by a bolt, passing through flanges turned up at the ends of the clamps. In the first-named character of clamp, but little compressing power can be obtained upon the sides of the boot-sole. In the last-named character of clamp the sole may be grasped firmly, but there is nothing to prevent the sole-plate and skate slipping crosswise beneath the sole of the boot, particularly in cases where the boot-sole is considerably wider than the metallic sole-plate.

The nature of my said invention consists—

First, in a double bracket, of metal, setting across the upper end of each of the arms of the runner, and united by the end of the arm passing through an opening in the bracket, and being riveted. The ends of the brackets are attached to the sole and heel-plates, respectively, by screws. This device is very strong and handsome, and allows the runner to be disconnected for grinding or polishing.

Second, in a pair of clamps, one of which is adjustable and clamped firmly by a bolt. The other is operated upon by a screw, that passes through one of the arms of the skate-runner. By this construction the skate can be adapted to various widths of boot-soles, and the clamping-operation will be very firm and reliable, and there is no opportunity for the skate itself to move laterally beneath the boot-sole.

In the drawing, *a* is the runner, formed with the arms or upward projections *b c d* extending to the under side of the sole-plate *e* and heel-plate *f*.

The double brackets *g* are each formed with an opening in the middle, as seen in fig. 4, into which a tongue, at the end of the arm of the skate, projects, and is riveted firmly, as seen at *i*. The thickness of the bracket is such that the parts are held firmly, and cannot work loose, and the screws at *o*, connecting the end-portions of the double brackets to the plates, render the attachment very secure. I prefer to employ the screws *o*, but rivets might be used, if desired.

The clamps *k* and *l* are applied to the sole-plate *e*. The clamp *k* is attached by a bolt, *p*, passing through a slot in the said plate *e*, so that it may be placed and secured in any desired position, according to the width of the sole of the boot.

The clamp *l* is held to the plate *e* by a bolt, *s*, but not clamped tightly, and the screw *m* passes through the flange or angle at the inner end of the clamp *l*, into the arm *c* of the skate-runner, the hole in which has a thread cut in it for the screw *m*, so that the rotation of said screw firmly clamps the shoe or boot-sole, or

releases the hold upon the same, and there is no opportunity for the skate itself to move laterally beneath the boot or upon the clamps.

The arm *c* is made wider than generally heretofore usual, in order that the screw *m* may be introduced in the same at the proper place for acting upon the clamp *l*.

What I claim, and desire to secure by Letters Patent, is—

1. The metallic brackets *g g*, each formed with an elongated hole receiving the tongue at the end of the runner-arm, into which said tongue is riveted, so that said brackets stand as T-pieces across the arms of the runner, and are united to the sole-plate by the screws or rivets *o*, as set forth.

2. The clamps *k l*, in combination with the screw *m*, that passes through the flange of the clamp *l*, and through a threaded hole in the runner, fitting said screw *m*, so as to confine the boot-sole, by the clamps *k l*, in the manner specified.

In witness whereof, I have hereunto set my signature, this sixth day of March, A. D. 1868.

A. F. MIGEON.

Witnesses:

CHAS. H. SMITH,

GEO. D. WALKER.